



[4910-13-P]

**DEPARTMENT OF TRANSPORTATION**

**Federal Aviation Administration**

**14 CFR Part 39**

**[Docket No. FAA-2019-0019; Product Identifier 2018-NM-130-AD; Amendment 39-19657; AD 2019-12-02]**

**RIN 2120-AA64**

**Airworthiness Directives; Bombardier, Inc., Airplanes**

**AGENCY:** Federal Aviation Administration (FAA), Department of Transportation (DOT).

**ACTION:** Final rule.

**SUMMARY:** The FAA is adopting a new airworthiness directive (AD) for certain Bombardier, Inc., Model BD-700-1A10 and BD-700-1A11 airplanes. This AD was prompted by reports of low clearance between the variable frequency generator (VFG) power feeder cables and adjacent hydraulic lines and/or fuel lines in the aft equipment bay, which could cause chafing damage. This AD requires modifying the routing of the VFG power feeder cables and harnesses in the aft equipment bay. The FAA is issuing this AD to address the unsafe condition on these products.

**DATES:** This AD is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The Director of the Federal Register approved the incorporation by reference of certain publications listed in this AD as of [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

**ADDRESSES:** For service information identified in this final rule, contact Bombardier, Inc., 400 Côte-Vertu Road West, Dorval, Québec H4S 1Y9, Canada; telephone: 514-855-5000; fax: 514-855-7401; email: [thd.crj@aero.bombardier.com](mailto:thd.crj@aero.bombardier.com); Internet: <http://www.bombardier.com>. You may view this service information at the FAA, Transport Standards Branch, 2200 South 216th St., Des Moines, WA. For information on the availability of this material at the FAA, call 206-231-3195. It is also available on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2019-0019.

#### **Examining the AD Docket**

You may examine the AD docket on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2019-0019; or in person at Docket Operations between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this final rule, the regulatory evaluation, any comments received, and other information. The address for Docket Operations is U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC 20590.

**FOR FURTHER INFORMATION CONTACT:** Steven Dzierzynski, Aerospace Engineer, Avionics and Electrical Systems Services Section, FAA, New York ACO Branch, 1600 Stewart Avenue, Suite 410, Westbury, NY 11590; telephone 516-228-7367; fax 516-794-5531; email [9-avs-nyaco-cos@faa.gov](mailto:9-avs-nyaco-cos@faa.gov).

## **SUPPLEMENTARY INFORMATION:**

### **Discussion**

The FAA issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 by adding an AD that would apply to certain Bombardier, Inc., Model BD-700-1A10 and BD-700-1A11 airplanes. The NPRM published in the Federal Register on February 22, 2019 (84 FR 5609). The NPRM was prompted by reports of low clearance between the VFG power feeder cables and adjacent hydraulic lines and/or fuel lines in the aft equipment bay, which could cause chafing damage. The NPRM proposed to require modifying the routing of the VFG power feeder cables and harnesses in the aft equipment bay.

The FAA is issuing this AD to address chafing damage in the aft equipment bay, which could result in a hydraulic/fuel leak and electrical arcing as an ignition source, and could cause an in-flight fire.

Transport Canada Civil Aviation (TCCA), which is the aviation authority for Canada, has issued Canadian AD CF-2018-22, dated August 2, 2018 (referred to after this as the Mandatory Continuing Airworthiness Information, or “the MCAI”), to correct an unsafe condition for certain Bombardier, Inc., Model BD-700-1A10 and BD-700-1A11 airplanes. The MCAI states:

Several aircraft have been discovered with low clearance between the Variable Frequency Generator (VFG) cables and hydraulic/fuel lines in the Aft Equipment Bay which may lead to chafing between the VFG cables and the hydraulic/fuel lines. Chafing may result in damage that could lead to a hydraulic/fuel leak and electrical arcing as an ignition source. This condition, if not corrected, could result in an in-flight fire.

This [Canadian] AD mandates a modification to the routing of the VFG power feeder cables and harnesses, to ensure the required clearance between the VFG cables and hydraulic/fuel lines in the Aft Equipment Bay.

You may examine the MCAI in the AD docket on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2019-0019.

## **Comments**

The FAA gave the public the opportunity to participate in developing this final rule. The following presents the comment received on the NPRM and the FAA's response.

### **Request to Refer to Revised Service Information**

Flexjet stated that the routing modification in the proposed AD refers to “outdated Service Bulletins SB 700-24-089 R1, SB 700-24-6014 R1, 700-1A11-24-028 R1 [and] 700-24-5014 R1.” Flexjet added that on September 27, 2018, all service information referenced in the NPRM was updated to Revision 2. Flexjet noted that Revision 2 of the service information merely clarifies certain procedures.

The FAA infers that the commenter is asking that this AD refer to the following Bombardier service information as the appropriate source for accomplishing the required actions:

- Service Bulletin 700-24-089, Revision 02, dated September 27, 2018.
- Service Bulletin 700-24-6014, Revision 02, dated September 27, 2018.
- Service Bulletin 700-1A11-24-028, Revision 02, dated September 27, 2018.
- Service Bulletin 700-24-5014, Revision 02, dated September 27, 2018.

The FAA agrees with the commenter's request. The FAA has included the Bombardier service information listed above as the appropriate source of service

information for accomplishing the required actions. The FAA has determined that no additional work is required for airplanes that have accomplished the actions specified in Revision 01 of the referenced service information. Revision 02 of the referenced service information clarifies the language in certain steps and adds notes to certain steps. The FAA has added Revision 01 of the referenced service information to paragraphs (h)(1) and (h)(2) of this AD to provide credit for actions done before the effective date of this AD.

### **Conclusion**

The FAA reviewed the relevant data, considered the comment received, and determined that air safety and the public interest require adopting this final rule with the changes described previously and minor editorial changes. The FAA has determined that these minor changes:

- Are consistent with the intent that was proposed in the NPRM for addressing the unsafe condition; and
- Do not add any additional burden upon the public than was already proposed in the NPRM.

The FAA also determined that these changes will not increase the economic burden on any operator or increase the scope of this final rule.

### **Related Service Information under 1 CFR part 51**

Bombardier has issued the following service information for Bombardier, Inc. Model BD-700-1A10 airplanes.

- Service Bulletin 700-24-089, Revision 02, dated September 27, 2018.
- Service Bulletin 700-24-6014, Revision 02, dated September 27, 2018.

Bombardier has issued the following service information for Bombardier, Inc. Model BD-700-1A11 airplanes.

- Service Bulletin 700-1A11-24-028, Revision 02, dated September 27, 2018.
- Service Bulletin 700-24-5014, Revision 02, dated September 27, 2018.

This service information describes procedures for modifying the routing of the VFG power feeder cables and harnesses in the aft equipment bay to ensure the required clearance between the cables and the hydraulic lines and/or fuel lines. These documents are distinct since they apply to different airplane models and configurations.

This service information is reasonably available because the interested parties have access to it through their normal course of business or by the means identified in the ADDRESSES section.

#### **Costs of Compliance**

The FAA estimates that this AD affects 112 airplanes of U.S. registry. The FAA estimates the following costs to comply with this AD:

##### **Estimated costs for required actions**

<b>Labor cost</b>	<b>Parts cost</b>	<b>Cost per product</b>	<b>Cost on U.S. operators</b>
Up to 5 work-hours X \$85 per hour = Up to \$425	Up to \$606	Up to \$1,031	Up to \$115,472

#### **Authority for this Rulemaking**

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. Subtitle VII: Aviation Programs, describes in more detail the scope of the Agency's authority.

The FAA is issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701: “General requirements.” Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

This AD is issued in accordance with authority delegated by the Executive Director, Aircraft Certification Service, as authorized by FAA Order 8000.51C. In accordance with that order, issuance of ADs is normally a function of the Compliance and Airworthiness Division, but during this transition period, the Executive Director has delegated the authority to issue ADs applicable to transport category airplanes and associated appliances to the Director of the System Oversight Division.

### **Regulatory Findings**

This AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify that this AD:

- (1) Is not a “significant regulatory action” under Executive Order 12866,
- (2) Will not affect intrastate aviation in Alaska, and
- (3) Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

## **List of Subjects in 14 CFR Part 39**

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

### **Adoption of the Amendment**

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 14 CFR part 39 as follows:

### **PART 39 - AIRWORTHINESS DIRECTIVES**

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

#### **§ 39.13 [Amended]**

2. The FAA amends § 39.13 by adding the following new airworthiness directive (AD):

**2019-12-02 Bombardier Inc.:** Amendment 39-19657; Docket No. FAA-2019-0019;  
Product Identifier 2018-NM-130-AD.

#### **(a) Effective Date**

This AD is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

#### **(b) Affected ADs**

None.

#### **(c) Applicability**

This AD applies to Bombardier, Inc., Model BD-700-1A10 and BD-700-1A11 airplanes, certificated in any category, serial numbers 9002 through 9831 inclusive, and 9998.



**(d) Subject**

Air Transport Association (ATA) of America Code 24, Electrical Power.

**(e) Reason**

This AD was prompted by reports of low clearance between the variable frequency generator (VFG) power feeder cables and adjacent hydraulic lines and/or fuel lines in the aft equipment bay, which could cause chafing damage. The FAA is issuing this AD to address this unsafe condition, which could result in a hydraulic/fuel leak and electrical arcing as an ignition source, and could cause an in-flight fire.

**(f) Compliance**

Comply with this AD within the compliance times specified, unless already done.

**(g) Routing Modification**

Within 24 months after the effective date of this AD: Modify the routing of the VFG power feeder cables and harnesses in the aft equipment bay to ensure the required clearance between the cables and the hydraulic lines and/or fuel lines, in accordance with the Accomplishment Instructions of the applicable service information listed in figure 1 to paragraph (g) of this AD.

**Figure 1 to paragraph (g) – Service information for modification**

<b>Airplane Model/Serial No.</b>	<b>Bombardier Service Information</b>
BD-700-1A10 9002 through 9312 inclusive; 9314 through 9380 inclusive; 9384 through 9429 inclusive	Service Bulletin 700-24-089, Revision 02, dated September 27, 2018
BD-700-1A10 9313, 9381, and 9432 through 9831 inclusive	Service Bulletin 700-24-6014, Revision 02, dated September 27, 2018

<b>Airplane Model/Serial No.</b>	<b>Bombardier Service Information</b>
BD-700-1A11 9127 through 9383 inclusive; 9389 through 9400 inclusive; 9404 through 9431 inclusive; and 9998	Service Bulletin 700-1A11-24-028, Revision 02, dated September 27, 2018
BD-700-1A11 9386, 9401, and 9445 through 9831 inclusive	Service Bulletin 700-24-5014, Revision 02, dated September 27, 2018

**(h) Credit for Previous Actions**

(1) This paragraph provides credit for the modification required by paragraph (g) of this AD for airplanes on which the modification specified in Bombardier Service Bulletin 700-24-6014 was performed before the effective date of this AD using Bombardier Service Request for Product Support Action (SRPSA) 000236314.

(2) This paragraph provides credit for the modification required by paragraph (g) of this AD, if the modification was performed before the effective date of this AD using the service information specified in paragraphs (h)(2)(i) through (h)(2)(iv) of this AD.

(i) Bombardier Service Bulletin 700-24-089, dated April 25, 2018, or Revision 01, dated August 21, 2018.

(ii) Bombardier Service Bulletin 700-24-6014, dated April 25, 2018, or Revision 01, dated August 21, 2018.

(iii) Bombardier Service Bulletin 700-1A11-24-028, dated April 25, 2018, or Revision 01, dated August 21, 2018.

(iv) Bombardier Service Bulletin 700-24-5014, dated April 25, 2018, or Revision 01, dated August 21, 2018.

**(i) Other FAA AD Provisions**

The following provisions also apply to this AD:

(1) *Alternative Methods of Compliance (AMOCs)*: The Manager, New York ACO Branch, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the manager of the certification office, send it to ATTN: Program Manager, Continuing Operational Safety, FAA, New York ACO Branch, 1600 Stewart Avenue, Suite 410, Westbury, NY 11590; telephone 516-228-7300; fax 516-794-5531. Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office.

(2) *Contacting the Manufacturer*: For any requirement in this AD to obtain corrective actions from a manufacturer, the action must be accomplished using a method approved by the Manager, New York ACO Branch, FAA; or Transport Canada Civil Aviation (TCCA); or Bombardier, Inc.'s TCCA Design Approval Organization (DAO). If approved by the DAO, the approval must include the DAO-authorized signature.

**(j) Related Information**

(1) Refer to Mandatory Continuing Airworthiness Information (MCAI) Canadian AD CF-2018-22, dated August 2, 2018, for related information. This MCAI may be found in the AD docket on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2019-0019.

(2) For more information about this AD, contact Steven Dzierzynski, Aerospace Engineer, Avionics and Electrical Systems Services Section, FAA, New York ACO

Branch, 1600 Stewart Avenue, Suite 410, Westbury, NY 11590; telephone 516-228-7367; fax 516-794-5531; email 9-avs-nyaco-cos@faa.gov.

(3) Service information identified in this AD that is not incorporated by reference is available at the addresses specified in paragraphs (k)(3) and (k)(4) of this AD.

**(k) Material Incorporated by Reference**

(1) The Director of the Federal Register approved the incorporation by reference (IBR) of the service information listed in this paragraph under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) You must use this service information as applicable to do the actions required by this AD, unless this AD specifies otherwise.

(i) Bombardier Service Bulletin 700-1A11-24-028, Revision 02, dated September 27, 2018.

(ii) Bombardier Service Bulletin 700-24-089, Revision 02, dated September 27, 2018.

(iii) Bombardier Service Bulletin 700-24-5014, Revision 02, dated September 27, 2018.

(iv) Bombardier Service Bulletin 700-24-6014, Revision 02, dated September 27, 2018.

(3) For service information identified in this AD, contact Bombardier, Inc., 400 Côte-Vertu Road West, Dorval, Québec H4S 1Y9, Canada; telephone: 514-855-5000; fax: 514-855-7401; email: thd.crj@aero.bombardier.com; Internet: <http://www.bombardier.com>.

(4) You may view this service information at the FAA, Transport Standards Branch, 2200 South 216th St., Des Moines, WA. For information on the availability of this material at the FAA, call 206-231-3195.

(5) You may view this service information that is incorporated by reference at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to:  
<http://www.archives.gov/federal-register/cfr/ibr-locations.html>.

Issued in Des Moines, Washington, on June 18, 2019.

Michael Kaszycki,  
Acting Director,  
System Oversight Division,  
Aircraft Certification Service.

[FR Doc. 2019-14415 Filed: 7/5/2019 8:45 am; Publication Date: 7/8/2019]